

- 31 -

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT:

- (A) NAME: National Research Council of Canada
- (B) STREET: 1200 Montreal Road, Building M-58, Rm EG-12
- (C) CITY: Ottawa
- (D) STATE: Ontario
- (E) COUNTRY: Canada
- (F) POSTAL CODE (ZIP): K1A 0R6
- (G) TELEPHONE: 613-993-3899
- (H) TELEFAX: 613-952-6082

(ii) TITLE OF INVENTION: TRIVALENT THROMBIN INHIBITOR

(iii) NUMBER OF SEQUENCES: 3

(iv) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10
- (D) OTHER INFORMATION: /Xaa= "beta-cyclohexyl-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 11
- (D) OTHER INFORMATION: /Xaa= "D-glutamic acid"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Asp Tyr Glu Pro Ile Pro Glu Glu Ala Xaa Xaa
1 5 10

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- 32 -

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:1
- (D) OTHER INFORMATION:/Xaa= "glycine, L-alanine, D-alanine, 2-aminoisobutyric acid, L- α -aminobutyric acid, D- α -aminobutyric acid, L-norvaline, D-norvaline, L-norleucine, D-norleucine, L-cysteine, L-penicillamine, D-penicillamine, L-methionine, D-methionine, L-valine, D-valine, L-tert-butylglycine, D-tert-butylglycine, L-isoleucine, D-isoleucine, L-leucine, D-leucine, cyclohexylglycine, L- β -cyclohexylalanine, D- β -cyclohexylalanine, L-phenylglycine, D-phenylglycine, L-phenylalanine, D-phenylalanine, L-homophenylalanine, D-homophenylalanine, L-histidine, D-histidine, L-tryptophan, D-tryptophan, L- β -(2-thienyl)-alanine, and D- β -(2-thienyl)-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:3
- (D) OTHER INFORMATION:/Xaa= "glycine, L-alanine, D-alanine, 2-aminoisobutyric acid, L- α -aminobutyric acid, D- α -aminobutyric acid, L-norvaline, D-norvaline, L-norleucine, D-norleucine, L-cysteine, L-penicillamine, D-penicillamine, L-methionine, D-methionine, L-valine, D-valine, L-tert-butylglycine, D-tert-butylglycine, L-isoleucine, D-isoleucine, L-leucine, D-leucine, cyclohexylglycine, L- β -cyclohexylalanine, D- β -cyclohexylalanine, L-phenylglycine, D-phenylglycine, L-phenylalanine, D-phenylalanine, homophenylalanine, histidine, L-tryptophan, D-tryptophan, L- β -(2-thienyl)-alanine, and D- β -(2-thienyl)-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:5
- (D) OTHER INFORMATION:/Xaa= "bAla"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Xaa Gly Xaa Gly Xaa
1 5

(2) INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 19 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- 33 -

- (A) NAME/KEY: Modified-site
- (B) LOCATION:1
- (D) OTHER INFORMATION:/Xaa= "4-tert-butylbenzenesulfonyl"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:3
- (D) OTHER INFORMATION:/Xaa= "D-pipecolic acid"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:4
- (D) OTHER INFORMATION:/Xaa= "glycine, L-alanine, D-alanine, 2-aminoisobutyric acid, L- α -aminobutyric acid, D- α -aminobutyric acid, L-norvaline, D-norvaline, L-norleucine, D-norleucine, L-cysteine, L-penicillamine, D-penicillamine, L-methionine, D-methionine, L-valine, D-valine, L-tert-butylglycine, D-tert-butylglycine, L-isoleucine, D-isoleucine, L-leucine, D-leucine, cyclohexylglycine, L- β -cyclohexylalanine, D- β -cyclohexylalanine, L-phenylglycine, D-phenylglycine, L-phenylalanine, D-phenylalanine, L-homophenylalanine, D-homophenylalanine, L-histidine, D-histidine, L-tryptophan, D-tryptophan, L- β -(2-thienyl)-alanine, and D- β -(2-thienyl)-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:6
- (D) OTHER INFORMATION:/Xaa= "glycine, L-alanine, D-alanine, 2-aminoisobutyric acid, L- α -aminobutyric acid, D- α -aminobutyric acid, L-norvaline, D-norvaline, L-norleucine, D-norleucine, L-cysteine, L-penicillamine, D-penicillamine, L-methionine, D-methionine, L-valine, D-valine, L-tert-butylglycine, D-tert-butylglycine, L-isoleucine, D-isoleucine, L-leucine, D-leucine, cyclohexylglycine, L- β -cyclohexylalanine, D- β -cyclohexylalanine, L-phenylglycine, D-phenylglycine, L-phenylalanine, D-phenylalanine, homophenylalanine, histidine, L-tryptophan, D-tryptophan, L- β -(2-thienyl)-alanine, and D- β -(2-thienyl)-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:8
- (D) OTHER INFORMATION:/Xaa= "bAla"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:18
- (D) OTHER INFORMATION:/Xaa= "beta-cyclohexyl-alanine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION:19
- (D) OTHER INFORMATION:/Xaa= "D-glutamic acid"

- 34 -

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Xaa Arg Xaa Xaa Gly Xaa Gly Xaa Asp Tyr Glu Pro Ile Pro Glu Glu
1 5 10 15

Ala Xaa Xaa